To: 'Paul, Sabu'[SPaul@mbakerintl.com]; 'Anurag Mishra'[Anurag.Mishra@respec.com]
Cc: 'Tony Donigian'[Tony.Donigian@respec.com]
From: Shaikh, Taimur
Sent: Mon 3/19/2018 9:59:06 PM
Subject: RE: EXTERNAL: RE: IL River TMDL Scenario

Hi Anurag,
I apologize for not getting back to you on the shapefiles. The link Sabu has provided is up to date on the current approved list for OK. It should be fine for use.
Thanks.
Taim.

Taimur A. Shaikh, Ph.D.
Assessment, Listing, and TMDL Section (6WQ-PT)
Water Division | EPA Region 6

From: Paul, Sabu [mailto:SPaul@mbakerintl.com]
Sent: Monday, March 19, 2018 4:06 PM
To: Anurag Mishra ; Shaikh, Taimur
Cc: Tony Donigian
Subject: RE: EXTERNAL: RE: IL River TMDL Scenario

Anurag,
I have downloaded the 303(d) list from EPA site https://www.epa.gov/waterdata/waters-geospatial-data-downloads#303dListedImpairedWaters. Attached layer Rad_303d_I_IRW_Diss has features like WB_ID (Waterbody ID) and ReachID (corresponding to HSPF). Please doublecheck my assignments, especially for OK121700020220_00 and OK121700030080_00. OK121700020220_00 seems to have contribution from three reaches, but based on the name of the stream "Tenkiller Ferry Lake, Illinois River Arm", I thought my assignment made more sense. Let me know if you have any questions. Also, if Taim provides an official layer, please use that instead of this.
Regards,
Sabu.

From: Anurag Mishra [mailto:Anurag.Mishra@respec.com]
Sent: Monday, March 19, 2018 3:49 PM
To: Shaikh Taimur <Shaikh.Taimur@epa.gov>; Paul, Sabu <SPaul@mbakerintl.com>
Cc: Tony Donigian <Tony.Donigian@respec.com>
Subject: RE: EXTERNAL: RE: IL River TMDL Scenario

Taim
I started calculating baseline daily load and scenario daily load for the 30-day period when the max of the 30-day GeoMean concentration occurs. For AR, I am supposed to calculate for the Reach 630, but for OK, I am not sure which exact reaches do I have to calculate load for. I think you were supposed to send me the Shapefile for the 303(d) reaches. Could you please send those soon, so that I can go ahead and resolve that?
Thanks
~A

ANURAG MISHRA
650.962.1864 office // 650.395.7224 cell

From: Anurag Mishra
Sent: Monday, March 19, 2018 9:52 AM
To: Shaikh Taimur <Shaikh.Taimur@epa.gov>; Sabu Paul <SPaul@mbakerintl.com>
Cc: Tony Donigian <Tony.Donigian@respec.com>
Subject: Re: EXTERNAL: RE: IL River TMDL Scenario

Taim,
Base and Scenario UCI files are attached. I also attached a spreadsheet that compares NUT-BEDCONC for baseline and 69AR/93OK.
Sabu,
In baseline sceario at RCH 630, instream gains were responsible for 16,752.4 lbs (or 4.8%) and for the 69AR/93OK scenario, instream gains were responsible for 5,516 lbs(5.2%).
Similarly, at RCH 890, instream gains were responsible for 51,846.9 lbs (or 9.3%) and for the 69AR/93OK scenario, instream gains were responsible for 8993.7 lbs(6.4%).

Thanks

From: Shaikh, Taimur <Shaikh.Taimur@epa.gov>
Sent: Monday, March 19, 2018 9:30:14 AM
To: Anurag Mishra; Sabu Paul
Cc: Tony Donigian
Subject: RE: EXTERNAL: RE: IL River TMDL Scenario

Hi Anurag,
What are the NUT-BEDCONC parameters set to? What were they?
Thanks.
Taim.

Taimur A. Shaikh, Ph.D.
Assessment, Listing, and TMDL Section (6WQ-PT)
Water Division | EPA Region 6

From: Anurag Mishra [mailto:Anurag.Mishra@respec.com]
Sent: Monday, March 19, 2018 10:15 AM
To: Sabu Paul <SPaul@mbakerintl.com>
Cc: Shaikh, Taimur <Shaikh.Taimur@epa.gov>; Tony Donigian <Tony.Donigian@respec.com>
Subject: RE: EXTERNAL: RE: IL River TMDL Scenario

I will have to process the output binary files and send those results later today.
When I did the test run on Saturday, the in stream contribution (lbs) decreased linearly with the decrease in NUT-BEDCONC.
A

On Mar 19, 2018 8:12 AM, "Paul, Sabu" <SPaul@mbakerintl.com> wrote:

Anurag,
Thanks for the info. For the 69/93 reduction, what is the in-stream contribution?
Regards,
Sabu.

From: Anurag Mishra [mailto:Anurag.Mishra@respec.com]
Sent: Monday, March 19, 2018 11:08 AM
To: Shaikh Taimur <Shaikh.Taimur@epa.gov>; Paul, Sabu <SPaul@mbakerintl.com>
Cc: Tony Donigian <Tony.Donigian@respec.com>
Subject: EXTERNAL: RE: IL River TMDL Scenario

69% Reduction in Arkansas meets standards in Illinois River at Arkansas State line.
69% Reduction in Arkansas and 93% reduction in OK meets standard in Illinois river in OK as well.
~A

ANURAG MISHRA
650.962.1864 office // 650.395.7224 cell

From: Anurag Mishra
Sent: Sunday, March 18, 2018 1:37 PM
To: Shaikh Taimur <Shaikh.Taimur@epa.gov>; Paul, Sabu <SPaul@mbakerintl.com>
Cc: Tony Donigian <Tony.Donigian@respec.com>
Subject: IL River TMDL Scenario

Taim/Paul
Based on the discussions that we had on Friday. I set up new scenarios that included reduction in NUT-BEDCONC parameters as well, along with the reduction in PS and NPS sources. These are constant concentration of PO4 and NH3 in sediment beds. I did not reduce BRBOD parameters as it didn't have any significant effect in loadings or concentrations.
Based on these reductions, AR will be able to meet standards with 69% Global reductions. I will try to find a scenario so that OK can meet the standard as well.
Thanks
~A

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